



# SAFETY MEETING REPROS:

Navy Support Facility, Diego Garcia

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## Emergency Preparedness and Response



Incidents such as fires, chemical spills, explosions and other unforeseen situations can put the safety of the employees, outside responders and the public in jeopardy; cause physical damage to a facility; disrupt or shut down operations; and cause environmental damage.

OSHA has many regulations requiring facilities to evaluate and plan for safety hazards in their respective workplace, and create written procedures on what steps will be taken to lessen and mitigate the hazards. Emergency preparedness is a concept that protects workers' safety and health.



### 29 CFR 1910 - Emergency Response and Preparedness for General Industry

#### Types of Emergency

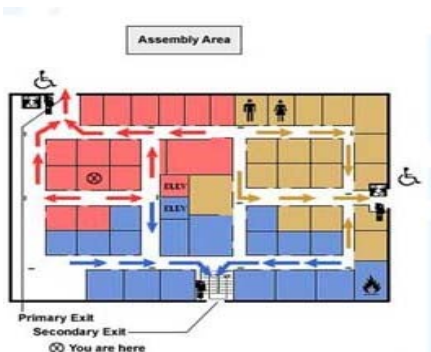
- ✗ Fire
- ✗ Hazardous Materials Releases
- ✗ Earthquakes
- ✗ Hurricanes
- ✗ Storms
- ✗ Tornadoes
- ✗ Energy/Utility outages
- ✗ Terrorism



- ✗ Fatality - Death of one or more employees from a work related incident.
- ✗ Catastrophe - In-patient hospitalization of three or more employees as a result of a work related incident.

#### General Requirements for Workplaces

#### Design and Construction requirements for exit routes



- ✗ Make exit route design permanent.
- ✗ Ensure that the number of exit routes are adequate based on the number of employees, the size of the building, its occupancy, and the arrangement of the workplace.
- ✗ Separate an exit route from other workplace areas with materials that have the proper fire resistance rating for the number of stories the route connects.
- ✗ Ensure that exit routes meet width and height requirements. The width of the exit routes must be sufficient to accommodate the maximum permitted occupant load of each floor served by the exit route.
- ✗ Ensure that doors used to access exit routes have side hinges and swing in the direction of travel (depending on occupancy and hazard areas).
- ✗ Design exit routes that lead to an outside area with enough space for all occupants.
- ✗ An outdoor exit route is permitted but may have additional site-specific requirements.

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## Maintenance, safeguards and operational features for exit routes

- ✖ Maintain the fire retardant properties of paints and solutions that are used in exit routes.
- ✖ Ensure that required exit routes and fire protections are available and maintained, especially during repairs and alterations.
- ✖ Ensure that employee alarm systems are installed, operable and in compliance with 29 CFR 1910.165 (Employee Alarm Systems).
- ✖ Direct employees through exit routes using clearly visible signs. These signs must meet the required letter height and illumination specifications.
- ✖ When openings could be mistaken for an exit, post appropriated signs stating "NOT AN EXIT".
- ✖ Arrange exit routes so that employees are not exposed to the dangers of high hazard areas.
- ✖ Exit routes must be free and unobstructed. Prevent obstructions, such as decorations, furnishings, locked doorways and dead ends within exit routes.



## Medical Service and First Aid



- ✖ Ensure that medical personnel are ready and available for advice and consultation on the overall employee safety and health condition in the workplace.
- ✖ Provide trained personnel and adequate first aid supplies to render first aid when a medical facility is not in near proximity to the workplace.
- ✖ Provide suitable facilities for immediate emergency use if exposure to injurious or corrosive material is possible.
- ✖ Adequately train personnel expected to administer first aid.

## Potable Fire Extinguishers

- ✖ Select and distribute portable fire extinguishers based on the class, size and degree of workplace fire hazards.
- ✖ Mount, locate and identify the extinguishers so they are readily accessible in an emergency and will not subject employees to potential injury.
- ✖ Provide only approved portable fire extinguishers.
- ✖ Maintain fire extinguishers. Maintenance includes monthly visual inspections, hydrostatic testing, annual internal examinations and all associated documentation.
- ✖ Ensure that the travel distance from employee to the nearest extinguisher is appropriate for the fire class.
- ✖ Exemptions may apply when employees are expected to evacuate the workplace in an emergency action plan that meets 29 CFR 1910.38 standards. This option may effectively minimize the potential for fire related injuries but would not authorize employees to use extinguishers.
- ✖ If portable fire extinguishers are provided for employee use, provide an educational program at initial employment and at least annually thereafter.
- ✖ Provide education specific to any equipment employees are expected to use as part of an emergency action plan. Provide training upon initial assignment and at least annually thereafter.



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## Employee Alarm Systems



- ✘ Provide a distinctive and perceivable alarm system for emergency action or safe evacuation.
- ✘ Specific requirements may apply if the alarm system includes telephones/manual operations, the workplace has 10 or fewer employees, or alarms serve more than one purpose.
- ✘ Ensure that all equipment used for alarm systems is approved and spare components are available.
- ✘ Test alarms at the frequency required. Follow safety requirements for testing and restoring alarms.
- ✘ Establish procedures and instruct employees on when and how to sound an alarm and notify emergency personnel, and what each alarm type means.



## Additional Requirements for Workplaces referenced in other requirements

### Emergency Action Plans



- ✘ Identify possible emergency scenarios based on the nature of the workplace and its surroundings.
- ✘ Prepare a written emergency action plan. The plan does not need to be written and may be communicated orally if there are 10 or fewer employees. At a minimum the plan must include:
  - a. Fire and emergency reporting procedures
  - b. Procedures for emergency evacuation, including type of evacuation and exit routes
  - c. Procedures for those who remain to operate critical operations prior to evacuation
  - d. Procedures to account for employees after evacuation
  - e. Procedures for employees performing rescue and medical duties
  - f. Names of those to contact for further information or explanation about the plan
- ✘ Review the emergency action plan with each employee when the plan is developed, responsibilities shift, or the emergency procedures change.
- ✘ Provide training to employees who are expected to assist in the evacuation.

### Fire Prevention Plans

This plan requires employers to identify flammable and combustible materials stored in the workplace and ways to control workplace fire hazards. Completing a fire prevention plan and reviewing it with employees reduces the probability that a workplace fire will ignite or spread.

Prepare a written fire prevention plan. The plan does not need to be written and may be communicated orally if there are 10 or fewer employees. Develop a plan that includes:

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- ✖ Major fire hazards, hazardous material handling and storage procedures, ignition sources and controls, and necessary fire protection equipment.
- ✖ How flammable and combustible waste material accumulations will be controlled.
- ✖ Maintenance of heat producing equipment to reduce ignition sources
- ✖ Names or job title of persons to maintain equipment to reduce ignition sources and fire potential.
- ✖ Names or job title of persons to help control fuel source hazards.
- ✖ Inform employees about relevant fire hazards and self protection procedures in the fire prevention plan when they are initially assigned to a job.



## Process Safety Management (PSM)

Process Safety management focuses on preventing or minimizing consequences from a catastrophic release of toxic, reactive, flammable or explosive chemicals.

- ✖ Conduct a Process Hazard Analysis (PHA) for each covered process, and update and revalidate the PHA every 5 years.
- ✖ Incorporate emergency shutdown actions and operations into the written operating procedures for each process. Include conditions that require emergency action and the qualified operator responsible for performing these procedures.
- ✖ Implement an emergency action plan for the facility.
- ✖ Maintain the mechanical integrity of PSM emergency systems and alarms.
- ✖ If employees are expected to handle an emergency release rather than promptly evacuate, implement an emergency response plan. Provide proper response and personal protective equipment for emergency responders under the plan.
- ✖ Review facility PSM emergency shut down and response procedures with employees.
- ✖ Provide additional training to employees who provide response actions.
- ✖ Clearly communicate emergency action plans with contractors. Contract employers must ensure that their employees are instructed in potential fire, explosion, or toxic release hazards related to their jobs.



## Hazardous waste operations and emergency response



- ✖ Identify emergency response personnel and responsibilities in the site's organizational structure.
- ✖ Include emergency response training details in the comprehensive site work plan
- ✖ Identify personal protective equipment (PPE) and other equipment for emergency response.
- ✖ Install alarm systems.
- ✖ Share site specific emergency response procedures with contractors and subcontractors.
- ✖ Under certain circumstances, emergency response personnel may qualify for medical surveillance program.
- ✖ Train employees assigned to respond to hazardous emergencies at cleanup sites on how to respond to expected emergencies.
- ✖ Regularly rehearse and train employees as part of the overall training program for site operations.



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## Permit-required confined spaces

- ✖ Provide retrieval systems or methods for non-entry rescue where feasible.
- ✖ Develop and implement procedures to summon rescue and emergency services to rescue entrants.
- ✖ Implement procedures to provide emergency services to rescued employees and prevent unauthorized personnel from attempting a rescue.
- ✖ Evaluate and select a rescuer based on his or her ability to effectively respond to a rescue in a timely manner, considering the hazards identified and the types of permit spaces entered. Ensure that the responder is properly equipped and proficient.
- ✖ Provide rescuers access to all permit spaces from which rescue may be necessary, so that appropriate rescue plans are developed and rescue operations practiced.
- ✖ An employer whose employees provide permit space rescue and emergency services must provide PPE to employees and no cost to those employees.
- ✖ Inform the rescuer(s) of potential hazards they may confront during the rescue at the site.
- ✖ An employer whose employees provide permit space rescue and emergency services must document the training of rescuers as authorized entrants. They must also be trained in the following:
  - a. PPE.
  - b. Their assigned rescue duties.
  - c. Basic first aid and cardiopulmonary resuscitation (at least one so trained employee must be available during rescue).
- ✖ Rescuers must simulate practice rescues from actual or representative permit spaces at least annually.
- ✖ Attendants must be trained in the following:
  - a. The hazards that may be faced during entry.
  - b. Behavioral effects of hazards to entrants.
  - c. Maintaining count and identity of entrants.
  - d. Remaining outside the permit space during entry until relieved.
  - e. Maintaining communication with entrants to monitor and alert them if evacuation is necessary.
  - f. Monitoring activities inside and outside the space to ensure acceptable entry conditions and ordering evacuation if necessary.
  - g. Summoning rescue and other services when authorized entrants need assistance to escape hazards.
  - h. Taking appropriate action when unauthorized persons approach or enter a permit space.
  - i. Performing non-entry rescue according to the employer's rescue procedures.
  - j. Restricting activities to duties that do not interfere with the attendant's primary responsibility to monitor and protect authorized entrants.



Emergencies and disasters can happen at the flick of a finger. There's no way of predicting when it will happen. Being prepared to respond to emergencies is the best way to avoid catastrophes and even fatalities. Planning and training is essential in having a successful Emergency Response Program.

Always be on the look out for potential hazards that may result in an emergency. In an emergency, response time is critical. Being late may result in a fatality. Conducting drills can help improve the response time.

Conduct evaluations of the program at least once a year to check if there are any improvements that can be made on the program.

Don't be caught off guard.

## Good Planning Leads to Good Response!

